



TRANSPORTATION SAFETY COMMISSION

CITY OF HARRISONBURG, VIRGINIA

TO: Transportation Safety Commission Members, Council members, City Manager Kurt Hodgen, Assistant City Manager Evan Vass

FROM: Brad Reed, Transportation Planner

DATE: May 10, 2010

RE: Transportation Safety Commission Summary from Thursday May 6, 2010 Meeting

The Transportation Safety Commission met on Thursday May 6, 2010 at 9:00AM in Room 205 at the City Municipal Building, 345 S. Main St.

Members and Advisory Members present included: Bill Blessing (Chair), Drew Williams (Public Works), Thanh Dang (Public Works), Brad Reed (Public Works), Lee Eshelman (JMU), Ofc. Greg Deeds (Police), Doug Stader (DMV), Len Van Wyk (citizen member), Calvin Ferrell (citizen), Sgt. Felicia Glick (Sherriff's Office)

Guests Present include: Jennifer Hibbert (CSPDC).

Citizens are always provided the opportunity to voice their views/concerns about any item before the commission. It is the policy of the Commission to move the agenda item to the beginning of the meeting when citizens attend Commission meetings to avoid detaining citizens for the entire meeting. However, any citizen is welcome to stay for the entire meeting.

Welcome

Special Presentation

1. Overview of Davis, CA trip – Thanh Dang

Ms. Dang gave a presentation on the trip she and the rest of the Davis Delegation took to Davis, CA to examine how a very bike friendly locality plans, manages, and funds its facilities. The addition of shared lane markings, or "sharrows", to the proposed 2010 Bicycle & Pedestrian Plan was discussed.

Please refer to the documents sent out with the minutes for more information on the trip. Bike maps for Davis, CA can be found at <http://cityofdavis.org/bicycles/maps.cfm>.

Old Business

1. Request from Council to review College Avenue (Parkview) for four way stop signs at intersection with Parkway Dr., Upland Dr., and Shank Dr. – Ofc. Greg Deeds

Officer Deeds presented the results from the speed spy performed by the police department on College Ave. at Shank Dr. No speed or traffic volume problem was found and there is no perceived cut through problem. The 85th percentile speed was 29 mph for 1,215 vehicles counted from 9 AM on April 9th to 1 PM on April 14th. Since the 85th percentile speed was not 10 mph or greater than the 25 mph speed limit, the neighborhood is ineligible for the Neighborhood Traffic Calming Program.

Ms. Dang suggested that this neighborhood may be a candidate for the Team Up to Slow Down program. The Commission recommends that this suggestion be followed.

2. Consideration of a right-turn lane on Parkwood Dr. onto Virginia Ave. –Brad Reed

Mr. Reed presented findings from the stop sign delay study he performed during periods of expected delays surrounding start and release times for Eastern Mennonite High School. Average stopped time in the morning was ~35 seconds, which is a level of service (LOS) E classification. Average stopped time in the evening was ~14 seconds, which is a LOS B. Maximum queue length was found to be 13 vehicles.

Considering that the intersection's performance was measured during the heaviest periods and was still adequate, Public Works recommended that no change be made at present. Cut through traffic was witnessed going through the business entrance on the SW corner when queues were at their longest. Ms. Dang and Mr. Reed suggested that delays and cut through traffic might be curtailed when EMHS constructs the proposed parking lot on their master plan, which will make a connection to Mt. Clinton Pike.

The Commission recommends that there be no change made to this intersection given present conditions.

3. Request for additional street lighting on College Ave. –Drew Williams

Brian O'Dell, Harrisonburg Electric Commission (HEC) Manager of Engineering, is reviewing this request, but no determination has been made.

4. Request for crosswalk on east side of E. Market St. and Mason St. intersection – Thanh Dang

Mr. Williams noted that if a crosswalk and signal were installed at this location, that there might be potential conflicts with pedestrians walking with permissive left turns (from southbound

Mason Street to eastbound East Market Street). He also noted that there are no sidewalks on the East side of Mason St. North of the E. Market St. signal.

Commission members discussed that the misaligned intersection puts pedestrians starting to cross at the northeast intersection out of the line of sight of a motorist making this movement. Also discussed was the lack of jaywalking laws in Harrisonburg and the desire to know how many pedestrian are currently using the unmarked crossing.

The Commission recommended that more time be taken to review the matter. A pedestrian count will be performed by Public Works at this location to determine the number of pedestrian desiring to use such a crossing.

5. School lights – *Thanh Dang*

City staff will look into this and report back at next meeting. Ofc. Deeds noted that the school zone sign for traffic travelling in the NB direction may need to be canted to make increase its visibility.

New Business

6. Sheetz Entrance at Vine St. – *Brad Reed & Drew Williams*

This issue has been researched by Public Works and the Transportation Safety Commission in the past, but no changes were made. The Commission has previously recommended that staff search for a solution. Mr. Reed and Mr. Williams presented the efforts of the Public Works Department to reconfigure the unsignalized Sheetz entrance on Vine St. near its intersection with Country Club Rd. Mr. Reed explained that there are two safety issues at this intersection. The first issue is that vehicles exiting Sheetz making a left turn to head NB onto Vine St. have difficulty seeing oncoming NB traffic due to the obstruction caused by vehicle queued at the Vine St. & Country Club Rd. traffic signal. The other issue is the vehicles heading NB on Vine St. turning left into this unsignalized entrance. When traffic is heavy and this left turn cannot be executed quickly, traffic backs up into the signalized intersection and causes a safety concern. Similar concerns are also held for ingress and egress left turn traffic at the Chamber of Commerce, though the problem is less severe than the one at Sheetz.

Mr. Reed explained that Public Works staff has had several meetings with Sheetz and its attorney, Mr. Robert Lunger. Mr. Reed presented a letter he received on April 29th, 2010 from Mr. Lunger denying the city's request for a right-in, right-out only reconfiguration of the Sheetz entrance because there was no problem witnessed during his observations.

Mr. Van Wyk asked if Sheetz could install a sign to restrict left turns out of this entrance since that is the more significant issue. The commission discussed this option and agreed that the sign would not fully resolve all the safety concerns. Ofc. Deeds explained that the left turn out of Sheetz is also inefficient and unsafe because of the "phantom waiver" phenomenon, wherein a

motorist in one lane will wave a left turner to go ahead, while traffic in the adjacent lane may still be moving.

Mr. Williams suggested that Public Works send letters to Sheetz and the Chamber of Commerce informing them that city staff plan to install delineators on Vine St. in this section to physically block left turns in or out of either entrance, but an appeal may be made at the June 10th Commission meeting and subsequently at City Council, if necessary. The city has the right to take such an action within public right-of-way. The Commission recommends that Public Works move forward with this suggestion and invite both parties to the next Commission meeting.

7. Speed Limit Increase on Linda Ln. (Country Club Rd. to Smithland Rd.) – Greg Deeds

The police department has requested that the speed limit be increased from 25 mph to 35 mph on Linda Ln between Country Club Rd. and Smithland Rd. Ofc. Deeds explained that police have been ticketing heavily because it is difficult for motorists to travel 25 mph on the large roadway.

The Commission recommended that the speed limit be increased to 35 mph from Country Club Rd. to a point just after the school bus loop traffic signal before Smithland Rd. Chairman Blessing will be sending a letter of recommendation to Public Works to this effect. Since the police chief has the authority to change speed limits, a request will be made to Colonel Harper that will include the Commission's recommendation.

Other Business/ Announcements

8. Safe Routes to School Grant – Waterman Elementary School awarded – Thanh Dang

Ms. Dang shared the news that the Safe Routes to School grant for which city staff applied has been awarded and went over all of the improvements that are to be made. Please refer to the map of proposed improvements sent out with the minutes for details.

Ms. Hibbert shared the similar news that the Safe Routes to School grants requested for sidewalks at Mountain View Elementary and Plains Elementary have also been awarded.

9. Bicycle & Pedestrian Plan and 2 & 5 year goals – Thanh Dang

Ms. Dang announced that the proposed 2010 Bicycle & Pedestrian Plan will be updated with a section for 2 & 5 year goals for construction of facilities.

10. Comprehensive Plan Review Meetings - Thanh Dang

Ms. Dang announced that Comprehensive Plan Review Meetings are being held by city staff at the Lucy Simms Center. The next meeting is on May 13th from 7-9 PM and will cover cultural resources & revitalization. The final meeting will be held on May 19th at the same time and will cover housing & collaboration. All are encouraged to attend. For more information, please visit www.harrisonburgva.gov/compplan.

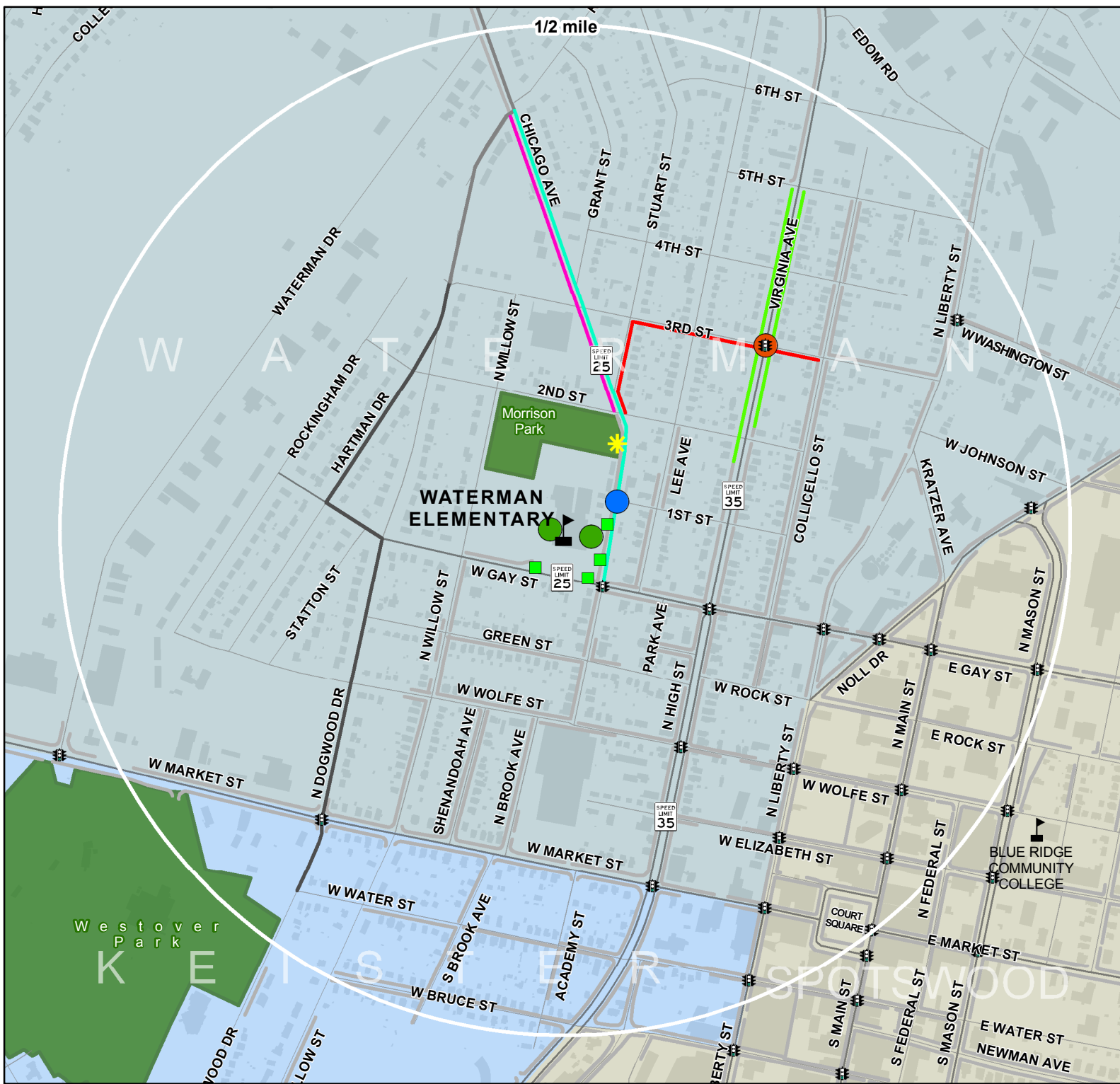
11. May is Bike Month – *Thanh Dang*

Ms. Dang announced that May is bike month and presented the official flier for the event. More information can be found at www.svbcoalition.org.

12. Public Works Staff Involvement Change – *Drew Williams*

Mr. Williams announced that Mr. Reed will be taking over the Commission duties of Ms. Dang, though Ms. Dang will still be helping with matters related to her position as Public Works Planner. The Commission thanked Ms. Dang for all of her valuable and hard work.

Adjourn



Chicago Ave. – Gay St. to Waterman Dr.

- AADT: 5,900 vehicles
- AAWDT: 6,400 vehicles

N. High St./Virginia Ave. (Rt 42) – Gay St. to 5th St.

- AADT: 11,000 vehicles
- AAWDT: 12,000 vehicles

- Willow St.
- AADT: 1,000 vehicles
- AAWDT: 1,100 vehicles

- 3rd St.
- No counts available (local/res.street)

- Stuart St.
- No counts available (local/res. street)

Source: 2008, Virginia Department of Transportation Daily Traffic Volume Estimates.
Special Locality Report 115, City of Harrisonburg.

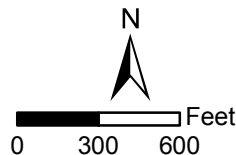
Infrastructure Improvement Projects

- Project A (Sidewalk)
- Project B (Sidewalk)
- Project C (Sidewalk)
- Project D (On-Street Bicycle Lanes)
- Project E (Pedestrian Signal & Crosswalks)
- Project F (ADA Ramp)
- Project G (Bike Rack & Concrete Pad)

Legend

- Sidewalk
- Shared Use Path
- Share the Road
- Park
- School Entrance
- ★ Flashing Beacon
- ⚡ Traffic Signal
- 🏫 School

Waterman Elementary
Map C: Infrastructure
Improvements





Bikes at a Junior HS

TRIP TO DAVIS, CA

March 4 - March 7, 2010

WHO WENT ON THE TRIP

- Mayor Kai Degner
- Muawai Da'Mes, Planning Commissioner
- Thanh Dang, Public Works Planner
- Thomas Jenkins, Shenandoah Valley Bicycle Coalition
- Tom Benevento, New Community Project
- Lara Mack, New Community Project
- Paulette Moore, documentary film maker/Eastern Mennonite University

WWW.HARRISONBURGDAVISBIKETRIP.BLOGSPOT.COM



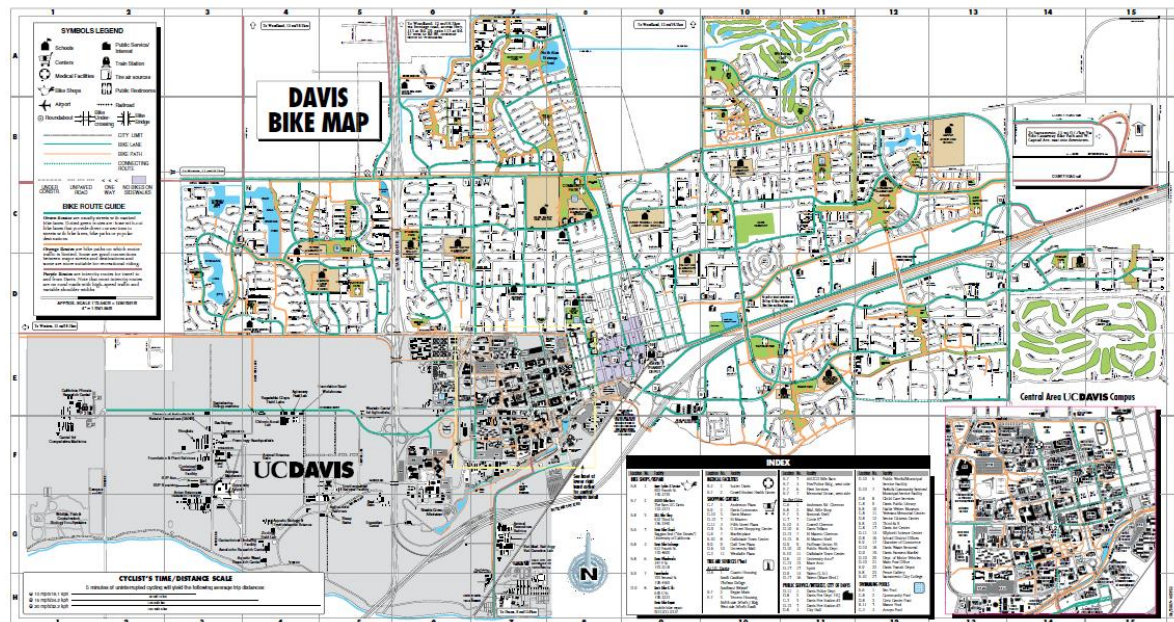
CITIES VISITED

- Davis, CA
 - 64,000 pop. 10 sq mi. UC Davis = 8.3 sq mi.
 - “Platinum” status
- Sacramento, CA
 - 465,000 pop. 92 sq mi.
 - “Bronze” status
- San Francisco, CA
 - 800,000 pop. 232 sq mi.
 - “Gold” status.

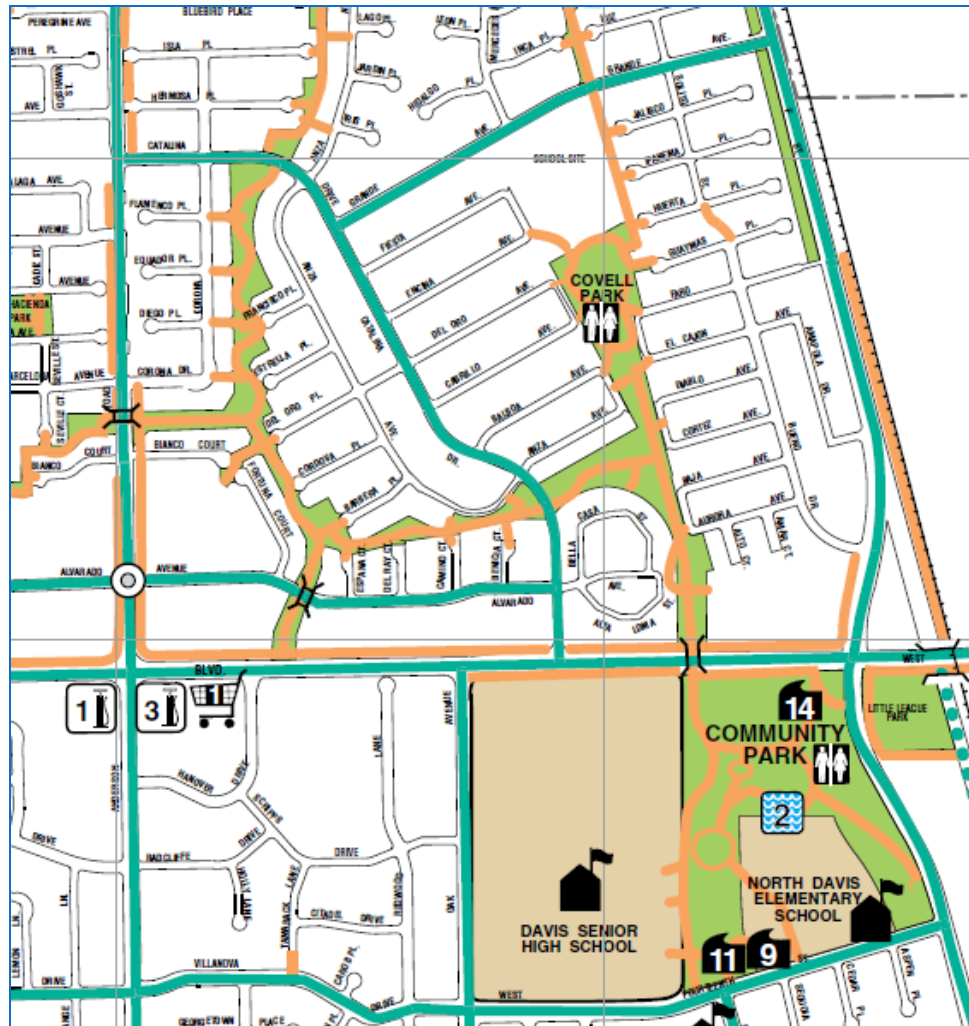


DAVIS

- Bisected by one interstate and one freeway.
- Planning for bicycles since late 1960s. Developed mostly after 1960s.
- Neighborhoods planned around “Greenbelts”
- 95% arterials & collectors have bike lanes (2005)



GREENBELT SYSTEM







Similar to Parts of Route 42

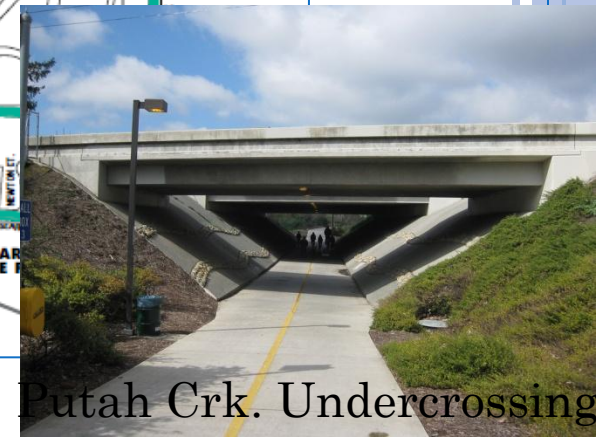
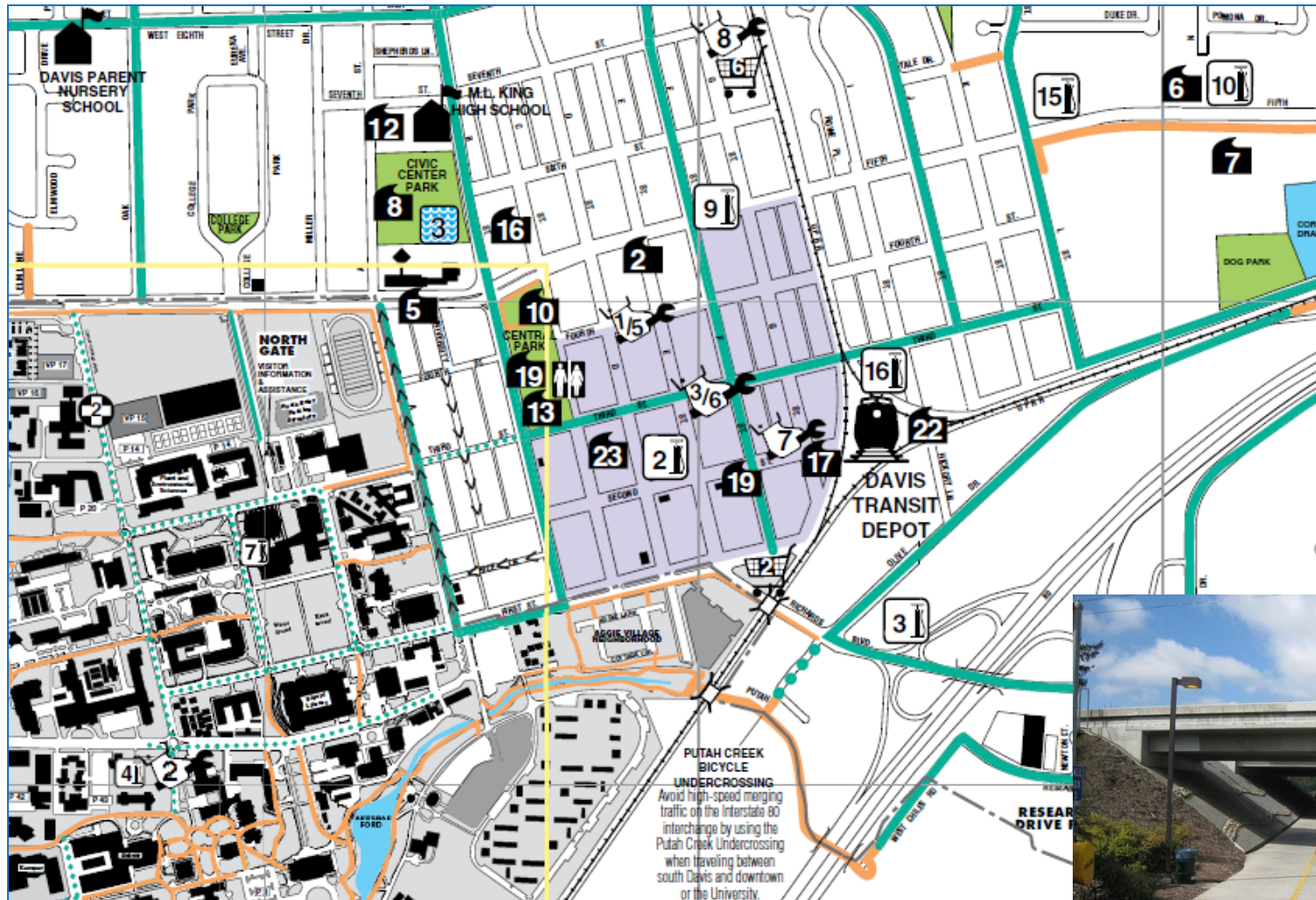


Wide for 2 people



Bike Signal Push Button

UC DAVIS & DOWNTOWN DAVIS



Putah Crk. Undercrossing

UC DAVIS – CLOSED TO VEHICULAR TRAFFIC



TRAFFIC CIRCLE (MOVIE)



BICYCLE SCRAMBLE (MOVIE)



SACRAMENTO



Sharrow on
residential collector



Reduced Lane
Widths for
Bicycle Lane



Creating a “Complete Street”



Half Street Closure



Neighborhood Traffic Circle



YOU CAN BICYCLE & LOOK GOOD TOO!



SAN FRANCISCO



Bike Box



Sharrow & Bike Box



Hills!



Linear Parks

PUBLIC SAFETY

- Shared use paths are lighted
- In 2009, 775 accidents, 71 involved bicyclists.
 - Violations given to bicyclists include:
 - 500 – disobeying signals
 - 200 – not using bicycle lights
 - 200 – not wearing helmets (under 18)
 - 100 – going the wrong way
 - 60 – wearing headphones
- If violation for not having bike light received, they can show proof of newly purchased light and receive a 10% discount (~\$25) on ticket
- Written warnings are most effective for positive enforcement. Recorded in database.

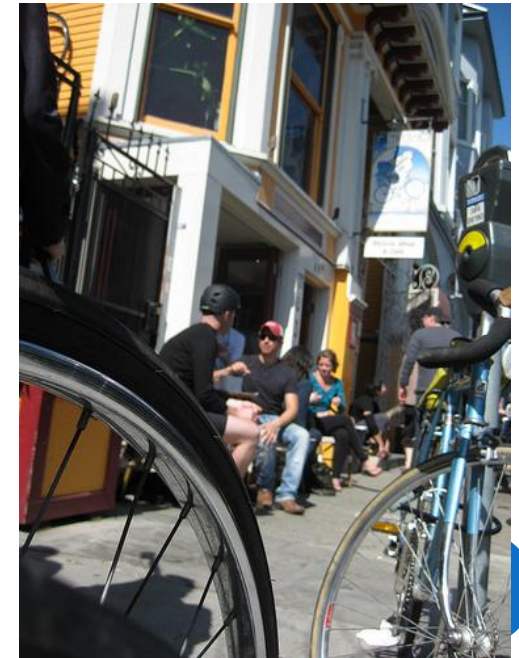


DAVIS FUNDING

- For new facilities
 - Ordinance for developers to integrate greenbelts into new housing subdivisions
 - Development impact fees
 - Bicycle planning is integrated into every department
- For maintenance
 - Federal & State dollars - gas tax, sales tax
 - Local dollars – sales tax
- 1995-2005, \$14 million spent on bicycle projects
- Budgets about \$100,000 per year for bike path maintenance
- In Sacramento, \$30,000 per year towards bicycle rack program



COMMUNITY



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Questions & Preliminary Answers from the Harrisonburg-Davis Trip

Last Updated: March 23, 2010

Collected questions from Harrisonburg City Staff, Council members, Citizens, and others. Additional answers will be provided once they are received.

TRIP BACKGROUND

This trip was funded and organized primarily by the Voluntary Gas Tax Group (<http://www.voluntarygastax.org/>), Shenandoah Valley Bicycle Coalition (<http://www.svbcoalition.org/>), New Community Project (<http://www.newcommunityproject.org/>), Davis Bicycles! (<http://www.davisbicycles.org/>) and members of the Harrisonburg and Davis communities.

The following individuals attended the trip: Mayor Kai Degner (City Council), Muawia Dames (Planning Commission), Thanh Dang (Public Works Department), Thomas Jenkins (SVBC), Tom Benevento (NCP/VGT), and Lara Mack (NCP).

A blog archiving reflections and pictures of this trip can be read at www.harrisonburgdavisstrip.blogspot.com.

Photos and short videos of the trip can be found at www.flickr.com/photos/cheezdunx/sets.

DAVIS/ UC DAVIS BACKGROUND

The City of Davis, California has a population of 64,000 people in 10 square miles. The University of California, Davis (UC Davis) is located outside of city limits within Yolo County and is 8.3 square miles. Davis is bisected by one interstate and one freeway through the city. Davis has been planning for bicycles since the late-1960s and installed their first bicycle lanes in the 1970s. Most of Davis was developed after the 1960s. Davis climate is dry, hot summers and mild winters.

Davis has been awarded "Platinum" status as a Bicycle Friendly Community by the League of American Bicyclists. City of Davis Bicycle Map can be downloaded at, <http://cityofdavis.org/bicycles/maps.cfm>.

SACRAMENTO BACKGROUND

The City of Sacramento, California has a population of 465,000 and is 92 square miles. California State University, Sacramento is the major local university. The climate is characterized by cool, wet winters and hot, dry summers. Sacramento has been awarded "Bronze" status as a Bicycle Friendly Community by the League of American Bicyclists.

SAN FRANCISCO BACKGROUND

The City of San Francisco, California has a population of about 800,000 and is 232 square miles. The climate is characterized by mild, wet winters and dry summers. San Francisco is also famous for its hills. San Francisco has been awarded "Gold" status as a Bicycle Friendly Community by the League of

American Bicyclists. The San Francisco Bicycle Map can be downloaded at, <http://www.sfbike.org/download/map.pdf>. Notice contour lines on the map.

All three cities are considered by the US EPA as being in nonattainment areas for 1-hour ozone violation.

KEY TERMS

- *Bicycle lanes* – delineate the travelway for bicyclists on the road, separated from motor vehicle traffic by a painted white line.
- *Greenbelts* – In Davis, greenbelts are publicly owned, linear greenspaces with a shared use path. The goal of the greenbelt system is to provide connections between schools, neighborhoods, playgrounds, shopping centers, etc. Greenbelts are about 100 ft wide with variations in width depending on existing conditions. There are a few greenbelts that are private and a public access agreement between the city and owner exists. Davis city staff expressed that greenbelts are why property values are higher in Davis than in neighboring communities.
- *Shared use paths* – off-road corridors separated from the road system. Typically paved 10-ft wide. In Davis, most shared use paths are located within greenbelts.

PLANNING & FUNDING

1. *How were/are Davis' bicycle facilities planned for and funded?*

Neighborhoods in Davis are planned around greenbelts (Davis' network of shared use paths). Developers are required to put in shared use paths as part of rezoning or permits.

Davis uses new development as a big contributor towards leveraging new bicycle and pedestrian facilities developing "an ordinance to hold housing developers financially accountable for integrating greenbelts into new housing subdivisions." Davis has also established development impact fees to help pay for the improvements to transportation facilities, parks, sewers, schools, etc. that are needed as new developments put pressure on existing infrastructure. Roadway impact fees have been positive for the city and there is continuing policy discussions on using that funding not just for vehicles but to use for multi-modal transportation.

An observation made is that bicycle planning is integrated into every department and staff position in Davis. Davis has one full-time Bicycle & Pedestrian Coordinator but the planners develop plans and review plans with bicycle needs in mind.

- Article on the history of Davis Greenbelts, http://www.healthytransportation.net/view_resource.php?res_id=13&cat_type=finding
- Listing of Davis' development impact fees, <http://cityofdavis.org/finance/ImpactFeeSum/2009.cfm>.

2. How does the State of California fund bicycle facilities?

Davis city staff expressed that state funding is generally insufficient even when combined with local dollars. Noted are the gas tax, and Proposition 42. More information at http://www.dot.ca.gov/hq/tpp/offices/ote/fundchrt_files/Trans-Funding-in-California-2008.pdf.

Davis city staff explained that localities in California do not get allocations for roadways based on lane miles like in Virginia. Davis city staff noted that most other communities a lot of general funds go to street/roads, more so than in Davis.

3. How much did the bicycle bridge over I-80 and underpasses cost? When was it constructed?

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

4. How much did the Putah Creek Bike Path, tunnel under the freeway cost?

The Putah Creek Bike Path was completed in October 2000. Built over 18 months at a cost of \$4.5 million, the 12-foot wide Putah Creek path crosses under Interstate 80, helping cyclists avoid a busy traffic interchange. The project was financed by \$750,000 in Proposition 116 funds, \$250,000 in development impact fees, and \$3.5 million in redevelopment agency funds.

5. Are there any road facilities in Davis where bicycles are prohibited? Are there higher volume roadways that bicycles are discouraged from using and alternative facilities provided or routes designated?

There are no road facilities in Davis where bicycles are prohibited. Bike lanes are established on nearly all arterial and collector streets in the city.

In Sacramento, the goal appeared to also have bike lanes or routes established on major streets in the city. However, Sacramento also provides bicycle routes using share the road and shared lane markings on what they call "Class 3" routes, which are signed/marked bicycle routes where the traffic volumes are lower but there are a lot of stop signs which may be undesirable, typically residential collector-type streets.

6. Other Significant Findings

The City of Davis bought a house in a neighborhood, demolished it, and constructed a shared use path through the parcel to make a connection from the neighborhood street to the greenbelt. The new connection reduced ¼ mile bicycling and walking commute for students and provided students with a travel route that kept them off of busy streets.

Sacramento reported that the City budgets \$30,000 per year towards a bicycle rack program to add new bicycle racks on city right-of-ways.

FACILITIES & DESIGN

7. *Are all shared use paths in Davis for bicyclists and pedestrians or are they only for bicyclists? How about skateboarders, rollerbladers, etc?*

All shared use paths in Davis are for all non-vehicular modes including bicyclists, pedestrians, skateboards, and rollerbladers. Service vehicles are permitted on the shared use path. Davis city staff are exploring the use of smaller service/maintenance vehicles/golf carts/etc. for use on the shared use path rather than heavier pickup trucks which causes more pressures and pre-mature damage to the path's pavement.

8. *For those areas where bicycle facilities are designated on the roadway (area between the curb), how do the road widths compare to those of Harrisonburg particularly in Downtown or other high traffic areas? Downtown Harrisonburg generally has streets that are narrower than other downtowns and no reasonable means of gaining more width.*

In Davis, the roadways are generally wider than compared to roadways in Harrisonburg because they had planned them with bicycle lanes in mind. All arterials and major collector streets have bicycle lanes on them with the exceptions of a few miles in older sections of the city where city planners, traffic engineers, and citizens have been working on a plan for improvements (i.e. 5th St. corridor). The 5th St. corridor is being planned to reduce a 4 lane roadway to a 3 lane roadway with bicycle lanes.

In Sacramento, the roadways are similar to the roadways in Harrisonburg and constraints with existing buildings, sidewalks, trees etc. prevents road widening for bicycle lanes. Sacramento staff noted many locations where "road diets" were done along heavy commercial corridors. That is, where a 4 lane roadway in two directions was reduced to a two-lane roadway in one direction with on street parking and bicycle lanes on both sides of the street traveling in the same direction. This example took over two years to plan with community involvement. There were also noted traffic calming benefits. Shared lane markings (aka "sharrows") were also used on Class 3 bicycle routes where the traffic volumes are lower but there are a lot of stop signs which may be undesirable, typically residential collector-type streets.

In San Francisco, there appeared to be are much narrower (anecdotal observation not measured) than in Sacramento and although there were a significant number of bicycle lanes, there was more widespread use of shared lane markings ("sharrows"). Shared lane markings have been used in San Francisco since 2004. San Francisco is one of several localities who has been using shared lane markings on an experimental basis (requires FHWA approval). Shared lane markings usage was recently approved in 2009 by the new Manual on Uniform Traffic Control Devices (MUTCD) for use throughout the country.

9. *How are bicycle routes signed?*

Davis is exploring the use of wayfinding signage for bicycles through the city, but currently there are no bicycle "route" signs, but only "bike lane" signs where needed along a bicycle lane.

10. *Can you provide some manufacturer, model, etc information or details about the traffic signal controller used in Davis that have the bike signals?*

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

11. Does Davis utilize any "leading pedestrian intervals" or advance walk for pedestrians? If so, has it been successful? Citizen feedback?

None were observed, but answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

12. Does Davis coordinate its traffic signals with bikes in mind and if so, what special accommodations are made? Impacts to vehicular transportation?

Answer Davis' Bicycle & Pedestrian Coordinator forthcoming.

13. Does Davis use bike boxes? If so, how are traffic signals adjusted (sensors, timing, etc)? What kind of paint/thermoplastic is used for bike boxes? What kind of maintenance and maintenance schedule is required?

Davis currently does not have any bike boxes, but San Francisco does. More information on bike boxes, <http://www.livablestreets.com/streetswiki/bike-boxes>. Harrisonburg city staff will inquire with San Francisco or other localities for answers.

14. What is your lighting policy for shared use paths? What criteria do you use to determine spacing of lights?

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

It was observed that all or nearly all shared use paths on Davis had lighting on the path, although lighting did not brightly illuminate all sections of the pathway. Lighting (utility cost and maintenance) on shared use paths/greenways are paid for by the city.

15. Other special features?

Observed was a variety of traffic calming measures for vehicular traffic, ex. traffic circles, narrowed road widths to accommodate bicycle lanes, curb extensions, etc.

Also observed where traffic calming measures for bicyclists, ex. when a shared use path crossed a 2-4 lane roadway, the curb cut was placed to the side of the pathway requiring that a bicyclist slow down significantly to enter the roadway rather than to dart straight out.

Bicycle lanes in Davis are very wide, between 6 to 8 feet allowing two bicyclists to ride side by side. Bicycle lanes in Sacramento and San Francisco are typically the 3 ft minimum standard and larger where retrofits still make it possible.

MAINTENANCE

16. What are the maintenance costs for the bicycle/pedestrian bridges, underpasses, shared use paths, bicycle lanes, etc?

It was learned that in Davis, bicycle and pedestrian facilities are well integrated into their planning and maintenance programs. Davis city staff could not provide data on how much they spent on annual bike lane maintenance because it's integrated with their road maintenance program, and they could not provide how much they spent annually on shared use path maintenance because much of that is integrated into the park maintenance system.

It was noted by city staff that the budget for Park Maintenance is larger than that for Police.

Reported by the League of American Bicyclists, Davis budgets approximately \$100,000 per year for bike path maintenance.

17. Where there is a shared use path (paved trail), what is the frequency of resurfacing the path? Are the paths wide enough that a standard asphalt spreader and roller can be used? Any tips?

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

18. Example of Greenways in Davis? If yes, how long is the greenway and what kinds of areas does the greenway connect or pass through? Are they easements or city right-of-way? Who maintains the greenways?

Davis has a series of shared used paths and greenbelts that run extensively through several sections of the city and connect neighborhoods to each other, to schools, to shopping centers, to business districts, and industrial districts. There are path connections from street culdesacs in neighborhoods to greenways behind neighborhoods. With few exceptions, all greenways/shared use paths are city right-of-way and are maintained by the Davis Parks & General Services Department.

19. What have been your biggest maintenance concerns related to bicycle facilities, on street and off street.

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming.

PUBLIC SAFETY & POLICE

20. For shared use paths, what is done to ensure that public safety vehicles can access them if needed?

It appeared that if needed, large emergency vehicles could mount a curb, cross over grassy areas, and gain easy access onto shared use paths.

21. If applicable, where shared use paths occur in areas away from motor vehicle lanes, has the city had to add lighting, bike patrol offices, etc. for safety purposes? If so, what are the costs associated with this?

Shared use paths in Davis are lighted (more details forthcoming).

There are bike patrol officers, but they do not exclusively patrol shared use paths.

No cost information was inquired while in Davis, but will be if the information is available.

22. Other notes:

The American Parkway is a linear park following the American River that includes 32 miles of shared use path. The City's policy for the shared use path is daytime hours only and signage is placed occasionally around the park. There are no lights provided for the trail. In reality, people use the park all the time, and there has been little notable crime on the path.

Out of 775 accidents in 2009, 71 accidents involved bicyclists. Violations given to bicyclists include 500 for disobeying signals, 200 for not using bicycle lights, 200 for not wearing helmets, 100 for going the wrong way, and 60 for wearing headphones.

If a person receives a violation for not having a bike light, they can purchase a bicycle light and show proof of that purchase and receive a 10% discount (about \$25 discount) on their violation (ticket). Also noted was that written warnings are most effective as positive enforcement.

Warnings are also recorded in a local database so an officer will know if the violator has already been warned and may give them a ticket the next time.

The Davis Police Department provides bicycle rodeo education upon request at schools.

The Davis Police Officers also noted that bike officers are more in contact with the homeless and transient populations in Davis. They have also found that more people open up to them and they have built more relationships which has helped with decreasing the crime and solving crimes.

SCHOOLS

23. How many public schools are there in Davis?

There are nine (9) elementary, three (3) junior high schools, one (1) senior high school, and one (1) high school. Schools are thought of as neighborhood schools rather than being located along the fringes.

24. When did Davis continue bus services and how did that happen?

This happened a long time ago, exact year could not be remembered. Contrary to "legend", bus service was not discontinued as a means of promoting alternative transportation, but rather it was a budget

issue. According to Dave Pelz, former Public Works Director, quoted from another source “The School District did run school busses at one time. It was a cost cutting measure and bicycling was the fall back along with parents car pooling. The Unitrans involvement came along slowly once they had figured out how to do it without calling it a school bussing program.”

For school field trips, parents drive their kids or buses are chartered.

25. Other significant findings:

Parents noted that greenbelts are good to get to school.

Parent advocates participate in the month of May’s Bike Month. Bike Loop event along greenbelt encourages whole community to bike together on one day. Stations are set up along the bike loop with volunteers to talk with parents about how to get from home to school, fit helmets, etc.

Save-A-Gallon Program. www.saveagallon.com, started with Bike Month. It is a competition between the schools on who uses the most non-car transportation to get to school, work, etc. At the schools, the program offers prizes to “winners”. Anyone can participate and catalogue their savings on the website.

One parent noted that her child’s school has at least 120 student bicyclists on a sunny day.

The Davis Bicycles! School Committee is only 1 year old. Davis Bicycles! is the local advocacy group.

Many parents and students utilize the “Bikepool” or “Bike Train” to get to school. These are self organized. For example, one parent can pick up students along the way to school and bike with the students to school. Parents might take turns to help share the burden.

Generally by 4th grade many students are riding their bikes to school in their own group without their parents. Schools have no minimum age policy for walking and biking to school alone.

One parent/teacher noted that kids are more alert in the morning after riding their bikes to school.

Parents noted that there is safety in numbers with more bicycles.

UNIVERSITY

26. Is UC Davis campus open to vehicular traffic?

UC Davis is closed to vehicular traffic except for occasional service and emergency vehicles. UC Davis features about one dozen traffic circles that aid in the movement of thousands of bicycles through campus during class changes. Campus has been closed to vehicular traffic since the 1960s.

27. How do service vehicles gain access to inner campus?

Access to inner campus is managed by card readers and sensors on vehicles.

28. Can you tell us about bicycle parking at UC Davis?

Bicycle parking is provided at every building on campus with some and few exceptions. There are over 20,500 bicycle parking spaces on campus. Most and all new bicycle racks are the "lightning bolt" design.

Bicycles are required to be parked on bicycle racks only.

29. Does UC Davis provide covered bicycle parking or bike lockers?

There are a few bike parking areas that UC Davis was able to install under existing overhangs. There are no "purpose-built" covered bike parking areas except at some dorms. UC Davis has 76 rentable bike locker spaces on campus.

30. How many students and faculty (provide separate numbers if available) do you think are driving to campus versus bicycling to campus?

In FY 08-09 the student, faculty, and staff mode share overall was: Bike (40.4%), Drive Alone (24.4%), Bus (19.9%), Carpool (7.5%), Walk (5.6%), Train (0.8%) and Skate (0.3%). If interested a powerpoint slideshow of pie charts breaking down the mode share for different user groups at Davis can be provided from Thanh Dang.

31. How many on campus vehicle parking spaces do you have? How much are parking passes per semester/year?

See "Parking Inventory" here: <http://taps.ucdavis.edu/parking/info/> .

See <http://taps.ucdavis.edu/parking/permits/> for permit rates.

32. Do you provide bicycle parking spaces inside dormitories? If so, how are they mounted? In ground/ on wall? (I saw lots of parking outside, just didn't know if there were any inside)

Some of the dorms have covered/enclosed bike parking areas. However, they are not secured. Anyone can access them, but there are bike racks in them.

33. Is there communication with incoming freshman concerning bicycles and transportation?

Most incoming freshmen live in campus student housing. The Housing office sends them links to our website during the summer before they arrive to provide them information about bicycling and transportation at the campus. In particular, there is a page on our website that summarizes what new UCD cyclists should know before they arrive. See "New UCD Cyclist" on this site:

<http://taps.ucdavis.edu/bicycle/education/>

Most new students register their bikes with TAPS at the start of the fall term. That is another opportunity for us to provide bike info to them.

34. Is there a bicycle share program or rental program on UC Davis campus?

UC Davis does not have a bike share program yet, but they are looking into some options. The campus bike shop does provide traditional bicycle rentals.

35. Is there a bicycle store/shop/repair center on UC Davis campus?

There has been a campus bicycle shop since the 1970s. The bicycle shop is a full service shop and hires student mechanics. The bicycle shop may have received some financial assistance to start but now it operates as a non-profit and is self funded (it receives no subsidies).

36. How does UC Davis fund bicycle infrastructure including bicycle racks? Do you wait for grants or is there a specific budget outlined for bicycles "stuff?" How much is it per year?

Whenever a new building is being planned and designed, the project budget always includes money for new and sufficient bike parking. To replace old, obsolete racks, we seek grants and also expend at least \$25K annually from our budget on replacement racks. That money comes from parking fines levied on campus.

37. What kind of Public Transit services are provided to UC Davis students?

Since public transit service is not provided for inner campus travel (students must walk or bike inside campus), public transit is only provided to and from student housing off campus to one of two terminals within campus. Buses arrive before the 10 minute class change and stay a little after before departing into the city. Many students ride the bus from home to campus and once on campus use the bikes that they have stored there to traverse campus.

Public Transit services for UC Davis and the City of Davis are run fiscally through a division of the University, although the City contributes funding. Public Transit does not run through the university.

38. Other significant findings:

It was reported that UC Davis has 1 bicycle officer and over 20,000 bicyclists per day.

MISCELLANEOUS

39. What are the tourism and economic development impacts of bicycling and bicycle infrastructure in Davis?

Davis has not yet done an economic impact study of bicycles, but anecdotally there was consensus among the people we met with (city staff from Davis and Sacramento, bicycle advocates, parents, etc.) that the benefits are all positive.

Noted were:

- Increased property values in Davis where greenbelts are located compared to neighboring communities.
- A recent century ride in Davis attracted over 12,000 riders plus many spectators from around the world.
- About \$1 million is saved each year by the school districts by not providing busing service. The walking and bicycling infrastructure exists for most students to walk and bike to school. Admittedly there are also a lot of students whose parents drive them to school and there are efforts by school bicycle advocates to encourage more students and parents to walk and bike.

40. Do Davis city employees use bicycles to conduct business?

Yes, but it depends on the employee. Davis provides a fleet of bicycles that are distributed among various city corp yards and many employees do use them, or their own bicycles. Plenty of employees also drive, especially in inclement weather.

41. How has Davis conducted bicycle counts to determine baseline number of bicyclists on roadways/paths/ etc?

Answer from Davis' Bicycle & Pedestrian Coordinator forthcoming. Davis bicycle count data available here, <http://cityofdavis.org/bicycles/bikecount.cfm>.

Schedule of Upcoming "Davis" Presentations

- Tuesday March 23 @ 7pm, Presentation to City Council at Council Chambers, 409 S. Main St.
- Friday April 23, 6-7:30pm @ Blue Nile, "Bike City". Cost: Free. Davis Delegation members will discuss their experience in Davis, CA: what they learned from the city's bicycle infrastructure and culture, what inspired them, and how they think we can apply these lessons to Harrisonburg. Discussion will be followed by a Q&A session. This event is part of our community's Earth Week Celebration (April 17-24) , <http://hburgearthweek.weebly.com/>.
- Saturday May 22, @ Court Square Theater (time to be announced later). Cost: \$7. Showing of "American Flyers" & Harrisonburg/Davis Bike Trip Documentary by Paulette Moore, documentary filmmaker/professor at EMU. The Shenandoah Valley Bicycle Coalition will also be accepting donations for local advocacy efforts & canned food for the Blue Ridge Area Food Bank. A social and dialogue will occur after the movie showings at Blue Nile Cafe. This event is occurring as part of Bike Month. Bike events happening throughout the Month of May! More information or to volunteer during Bike Month contact Lara Mack at lmack4286@gmail.com or Thomas Jenkins at tj@shenandoahbicycle.com.